HABITS OF THE ESKIMO CURLEW (NUMENIUS BOREALIS) IN NEW ENGLAND.

BY GEORGE H. MACKAY.

From the shores of the Arctic Ocean, where they breed, to Patagonia, where they probably winter (Ibis, 1878, page 404), is a journey of seven thousand miles; yet the Eskimo Curlews, familiarly known as Doughbirds, compass it every year on their migrations. Starting from the far north after incubation is over, the older birds, which are then generally lean and in poor condition, commence to straggle down in small parties until about the first of August they reach Labrador, where they remain, with constantly increasing numbers, for about three weeks, becoming extremely fat upon the berries of the *Empetrum nigrum* (known as curlew-berry, crow-berry or bear-berry) to which they are particularly partial.

About the twenty-third of August, at such time as the weather conditions prove favorable for migration southward, they undertake their long journey to the southern portion of the South American continent. They are then in the best physical condition, and are frequently so fat that when they strike the ground after being shot flying the skin bursts, exposing a much thicker layer of fat than is usually seen in other birds, hence their local name 'Doughbird,' from the saying "as fat as dough." At this season they are considered by epicures the finest eating of any of our birds, and consequently they are watched for and sought after by sportsmen with great perseverance during the very short period that they are expected to pass along this coast during their migration southward. They suffer but little, however, in New England from such pursuit, as the number killed in the great majority of years is trivial and has no effect in diminishing their numbers.

When I take a retrospective view for a series of years I am more than ever impressed with the few birds killed except in some very exceptional year. In most years they are far from being abundant, in fact are rather the reverse. I am inclined to the opinion that these birds generally pass our coast much further from land than has been usually supposed, for it rarely happens

that any large numbers of them are deflected over the land by ordinary storms, very severe thunder and lightning with heavy rain, or dense fogs, apparently being required to drive them from their customary line of flight and force them to seek land until more favorable conditions for migrating take place, for they are unusually strong and high fliers with great endurance. I believe also, that it is only in exceptional years that we see a portion of the principal movement of these birds while making their southern migration.

Those which do visit us almost invariably land with their boon companions, the American Golden Plover, of whose flocks I have frequently noticed they were the leaders, and I can scarcely call to mind, as I write, an instance where any number of Eskimo Curlew have landed without there being more or less Golden Plover present at the same time.

Those birds which may come cannot, if they would, remain any longer than is absolutely necessary, for they are so harassed immediately after landing that the moment there occurs a change in the weather favorable for migration they at once depart. They appear to leave the coast at Long Island, New York, and strike further out to sea, and then are not seen on the Atlantic coast for another year.

It is on the spring migration to their breeding grounds, while passing through the United States and especially along the Mississippi Valley, that they suffer, being unmercifully shot in many places on the route, particularly in Nebraska. Like the American Golden Plover (*Charadrius dominicus*) the Eskimo Curlew never returns in the spring to the North via the Atlantic coast.*

Of those I have observed in New England during a series of years I may say that most of their habits closely resemble those of the Golden Plover. In migration they fly in much the same manner, with extended and broadside and triangular lines and clusters similar to those of Ducks and Geese at such times. They usually fly low after landing, sweeping slowly over the ground,

^{*}The only Eskimo Curlew that I have ever heard of being obtained in the spring in New England was shot by my friend Mr. Augustus Dentou on Cape Cod, Mass., about the end of May, 1873. It was a lone bird. Mr. Denton told me that he always supposed it was a bird which had been wounded the previous autumn and had managed to live through the winter; the reason for this conclusion was the condition of the bird, it being very thin, and sedgy in taste when eaten.

apparently looking it over, generally standing motionless for quite a little while after alighting, which, owing to their general color approximating so closely to the withered grass, renders it difficult at times to perceive them. I have had a flock of fifty or sixty alight within thirty yards of me, and have been unable to make out more than two or three birds. If disturbed they will frequently alight again at no great distance, if not previously harassed, and under the same conditions they can be approached at all times, for they are either very tame or very shy.* They seek ont, and are found in, the same localities selected by the Golden Plover (see Auk, Vol. VIII, p. 17) with which they generally associate if any are in the vicinity, there always being a strong friendship between them. They are not so active as the Plover; on the ground they appear less inclined to move about, especially after landing and during rainy weather when I have at times noticed them standing on the ground quite close together, every bird headed to the wind, with heads and necks drawn down and resting on their backs, with the rain running off their tails. At such times they could be approached on foot to within half a gunshot, showing little fear.

They are said to make a whistle somewhat similar to the Hudsonian Curlew's (Numenius hudsonicus), only very much finer in tone. The only note I have ever heard them make is a kind of squeak, very much like one of the cries of Wilson's Tern (Sterna hirundo), only finer in tone. If one or more of these birds are wounded, after shooting at a flock, they will often keep calling and jumping up, trying to fly, which causes the remainder to hover over or in near proximity to the wounded ones, thus frequently affording an additional shot. They are very gregarious, and unless much harassed will come with the greatest confidence to either Golden Plover, or Curlew decoys.

The young birds do not as a rule make their appearance in New England before the eighth or tenth of September, continuing up to about October first. They appear very gentle and

^{*}While on Nantucket Island they seem to prefer the ground near the headlands adjoining the beach shore, even among the beach grass, probably on account of the abundance of the large gray sand spider (*Lycosa*) which lives in holes in the sand in such localities. They feed on this spider and also eat the seeds of the poverty-grass (*Hudsonia tomentosa* Nutt.), especially when it is on ground which has been burnt over.

tame.* I have occasionally shot the older birds on the Island of Nantucket, with their vent stained purple from the berries of the *Empetrum nigrum* (probably obtained in Labrador).

In order to give some idea that may serve as an indication when the Curlew moves southward, I have copied the following from my notes, — my place of observation being the Island of Nantucket, Mass. The years 1858 to 1871 and 1873-1876, both inclusive, were given me by a friend, and are for Cape Cod, Mass.

1858, Aug. 31.-Some Eskimo Curlew, with Golden Plover.

1859. Aug. 29.-Some Eskimo Curlew, with Golden Plover.

1860. September.—Some Eskimo Curlew during the month.

1861, Sept. 5 .- First birds shot, - with Golden Plover.

1862 .- No birds.

1863, Sept. 5.—No birds of any account until Sept. 5 when an immense flight, the birds remaining through September on Cape Cod. Over 200 shot on Nantucket. The wind was light, southwest, with thick fog. It was northeast the previous day. The largest flight known on the island of late years.

1864 .- No birds.

1865 .- No birds.

1866, September.—A very few birds. No flight.

1867.-No flight.

1868, September.—No birds until September, when a very few. No flight.

1869. September.-No flight. A few scattering birds only.

1870.—Only a very few scattering birds this year.

1871.-No flight or birds.

1872, Aug. 29.—Raining and blowing very hard with wind southeast. Some Eskimo Curlew landed. Saw one flock of fifty.

Sept. 15.—Cape Cod. A flight, but did not stop; a few scattering birds landed; shot six.

1873, Aug. 25.—Some birds.

1874.—No flight or birds, an unusually poor year.

1875.—No Eskimo Curlew noted, nor have I seen any on Nantucket. Some shot on Cape Cod Sept. 5,—the first this year.

1876.—Some birds in September.

1877, Aug. 27.—A severe rain last night, and a good many Eskimo Curlew landed; I saw 250 (estimated) up to three o'clock P. M. today, the same birds that came last night. This morning until ten o'clock A.M. thick fog; then came out hot. Saw 100 Eskimo Curlew on the 29th.

^{*}There is a way of determining the old birds from the young, where there is little difference in plumage to distinguish them; on bending the legs the former's will break, the latter's will not.

1878, Aug. 25.—Slight rain this evening and night; a few Eskimo Curlew landed; saw one flock of 60 or 70 birds (estimated); wind light, north and west; on the 27th saw a flock of 50 birds (estimated).

1879. - Shot none, and have none noted.

1880.—Up to Sept. 10 only twelve Eskimo Curlew were shot on the Island.

1881, Sept. 2.—Tonight some Eskimo Curlew landed with American Golden Plover; the wind was northeast and weather thick; saw a flock of 50 on the 3d; and 65 on the 4th.

1882.—Have only heard of about twenty-five Eskimo Curlew during the entire season.

1883, Aug. 26.—On the night of the 25th and morning of the 26th it rained, and blew very hard from the northeast (northerly and northwesterly weather having previously prevailed). This storm was local, as far as New England was concerned. New Jersey and New Brunswick also had storms, but in between these points nothing severe was noticed. During the night of the 25th and next day (26th) the Eskimo Curlew landed with Golden Plover, both in large numbers, and nearly evenly divided as to numbers, there being rather less of the Curlew. On the 29th all birds had left. This was the first flight of either kind this season.

1884, Aug. 31.—A very few Eskimo Curlew landed; wind southeast. A very large flight of Golden Plover and some Eskimo Curlew passed Cape Cod and Nantucket Island today, but none to speak of landed or were shot at either place. The wind was southeast, light, with clear weather, at the Cape, great numbers being seen passing, mostly in the afternoon. It was foggy on Nantucket during the morning.

1885.—I have not seen an Eskimo Curlew this season; but eight having been shot on the Island, these came after September 10.

1886, Aug. 24.—Very severe thunder and lightning tonight, accompanied with severe rain, wind northeast, blowing hard; a few scattering Eskimo Curlew landed with a very large number of Golden Plover.

1887, Aug. 28.-Shot one Eskimo Curlew.

Sept. 18.—Shot one Eskimo Curlew. Not on the Island much this season.

1888, Sept. 1.—Quite a number of Eskimo Curlew landed this afternoon, wind southwest, light, thick fog. About all the birds that landed on the 1st left the next morning.

Sept. 26.—Shot one.

1889, Sept. 11.—On this night there was considerable rain and fog. with wind southeast. A small number of Eskimo Curlew landed. There has been a circular storm, the northern limit of which was Long Island, N.Y.; it was considered the severest for twenty years; it came up from the West Indies following the Gulf Stream, Nantucket Island only having the remnants of the outside edge of it. No birds either Eskimo Curlew or Golden Plover landed during the early stage of this storm, those which did appear arriving when it was about over.

Sept. 22.—I saw four, and shot one, the wind being northwest and cold.

Sept. 23.—I saw three more, but think they were the ones seen yesterday.

Sept. 29.—1 saw and shot two.

Oct. 2 .- I saw two and shot them.

All these late birds, I think, had been living on the Island of Nantucket since the Sept. 11 landing. The summer of 1889 has been unusually wet and very cool.

1890.--Some fifteen Eskimo Curlew are reported to have been seen this season; none have been killed to my knowledge; I have not seen any. Some birds passed Tuckernuck and Nantucket on Sept. 18, a few of which remained over night; all gone next day.

1891, Aug. 20.—Thirteen were seen, they remained during the next day and then departed.

Sept. 1.-I saw one.

Sept. 7.—Three birds shot on Tuckernuck Island.

Sept. 13.-Two seen, one shot.

Sept. 15.—Two shot from a flock of Hudsonian Curlew.

Sept. 17.—Flock of thirteen seen. Up to Oct. 1 the birds above enumerated as being shot or seen comprise the entire number killed or noted on the Islands of Nantucket and Tuckernuck for this year.

A PRELIMINARY LIST OF THE BIRDS OF SAN JOSÉ, COSTA RICA.

BY GEORGE K. CHERRIE.

(Continued from Vol. VIII, p. 279.)

- 17. Dendroica cærulea.—I have seen the Cerulean Warbler only four times in Costa Rica. The first was a young male taken Aug. 24, 1890, in company with a lot of *D. æstiva* and *D. blackburniæ*. The other three were also young birds and were taken as follows: male Sept. 12, female Oct. 7, and female Oct. 24, 1890.
- 18. Dendroica dominica.—Oct. 4, 1891, I saw a handsome male in the central park. It is the only example I have seen in Costa Rica.
- 19. Seiurus noveboracensis.—A series of twenty examples were taken between the middle of September and the last of May.
- 20. Seiurus aurocapillus.—I have taken but one at San José, and only three in Costa Rica.
 - 21. Seiurus motacilla.—Rare.
 - 22. Oporornis formosa—I took a single female Oct. 7, 1890.
- 23. Geothlypis trichas.—In three years' collecting only five have been taken. These evidently belong to the eastern North American form.